

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2015

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/17/2015 04/17/2015	Michael Pitta

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_MA0003_01_s _ 2013_4				
Action/Comments					
Inspector Comments: Sutter Yard has a copy of the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	6
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_MA0003_01_s _ 2013_6				
Action/Comments					
Inspector Comments: The Sutter Yard has adequate flood fight supplies and equipment.					

No Photos

LM Start		Rating **	A	Issue No.	7
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_MA0003_01_s _ 2013_7				
Action/Comments					
Inspector Comments: The Sutter Yard has received flood fight training.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Unit No. 01 Feather River	Right	5.11	04/17/2015 04/17/2015	Michael Pitta

LM Start	0.01	Rating **	M	Issue No.	8
LM End	5.10	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.898032 °	°
				-121.617923 °	°
DWR ID	DWR_MA0003_01_s_2015_8				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

Photo 1 of 1 : SP_2015_MA0003_195_8_20150421_00011.jpg



Photo of vegetation taken looking upstream at the landside of the levee.

LM Start	0.05	Rating **	M	Issue No.	12
LM End	5.10	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.897874 °	°
				-121.617092 °	°
DWR ID	DWR_MA0003_01_s_2015_12				
Action/Comments					
Control annual grass and weeds on the levee slopes and easements.					

No Photos

LM Start	0.05	Rating **	M	Issue No.	9
LM End	0.05	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.897878 °	38.897878 °
				-121.617088 °	-121.617088 °
DWR ID	DWR_MA0003_01_s_2015_9				
Action/Comments					
Repair depressions or ruts in the crown or slope.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/17/2015 04/17/2015	Michael Pitta

LM Start	0.78	Rating **	U	Issue No.	140
LM End	0.78	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.903339 °	38.903339 °
				-121.606209 °	-121.606209 °
DWR ID	DWR_MA0003_01_f_2014_140				
Action/Comments					
Repair depressions or ruts in the crown or slope. Inspector Comments: There is a sinkhole on the landward toe road approximately 12" in diameter leading to the adjacent drainage ditch.					

Photo 1 of 2 : SP_2015_MA0003_195_140_20150401_00008.jpg



This photo was taken from the landward levee slope near the toe road facing north looking at an approximately 12" sink hole going from the toe road to the adjacent drainage ditch that parallels the toe road. Fall 2014.

LM Start	0.78	Rating **	U	Issue No.	140 (cont)
LM End	0.78	Issue Type +	Ma	Location *	N/A

Photo 2 of 2 : SP_2015_MA0003_195_140_20150401_00009.jpg



This is another photo of the sink hole to show its relationship to to levee toe, toe road, and drainage ditch. Fall 2014.

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/17/2015 04/17/2015	Michael Pitta

LM Start	0.80	Rating **	M	Issue No.	5
LM End	0.80	Issue Type +	Ma	Location *	LS
Category	Interior Drainage & Piping Systems			GPS Latitude/Longitude	
				Start	End
Item	Sluice / Slide Gates			38.903291 °	38.903291 °
				-121.605747 °	-121.605747 °
DWR ID	DWR_MA0003_01_s _ 2012_5				
Action/Comments					
Inspector Comments: This pipe leaked during the high water event of 2010/2011.					

Photo 1 of 1 : SP_2015_MA0003_195_5_20150401_00001.jpg



Levee mile 0.80, this photo is looking at the landside toe, one of these pipes leaked during the high water event of 2010/2011. A flap gate prevents flow from the waterward side to the landward side of the levee.

LM Start	1.51	Rating **	M	Issue No.	13
LM End	1.51	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.904680 °	38.904680 °
				-121.594229 °	-121.594229 °
DWR ID	DWR_MA0003_01_s _ 2015_13				
Action/Comments					
Repair depressions or ruts in the crown or slope.					

Photo 1 of 1 : SP_2015_MA0003_195_13_20150421_00012.jpg



Photo of a depression in the crown, taken looking at the landside.

LM Start	1.77	Rating **	M	Issue No.	14
LM End	1.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.907025 °	38.907025 °
				-121.590375 °	-121.590375 °
DWR ID	DWR_MA0003_01_s _ 2015_14				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/17/2015 04/17/2015	Michael Pitta

LM Start	2.18	Rating **	M	Issue No.	15
LM End	2.18	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.911869 °	38.911869 °
				-121.586093 °	-121.586093 °
DWR ID	DWR_MA0003_01_s _ 2015_15				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	2.18	Rating **	M	Issue No.	18
LM End	2.18	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.911869 °	38.911869 °
				-121.586093 °	-121.586093 °
DWR ID	DWR_MA0003_01_s _ 2015_18				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

No Photos

LM Start	3.20	Rating **	M	Issue No.	20
LM End	3.20	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.925909 °	38.925909 °
				-121.585401 °	-121.585401 °
DWR ID	DWR_MA0003_01_s _ 2015_20				
Action/Comments					
Repair slope instability.					

Photo 1 of 1 : SP_2015_MA0003_195_20_20150421_00013.jpg



Photo of slope on the landside facing upstream, areas with little vegetation appear to have eroded leaving the crown smaller.

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Unit No. 01 Feather River	Right	5.11	04/17/2015 04/17/2015	Michael Pitta

LM Start	3.59	Rating **	M	Issue No.	19
LM End	3.59	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.930063 °	38.930063 °
				-121.590211 °	-121.590211 °
DWR ID	DWR_MA0003_01_f_2013_19				
Action/Comments					
Elderberries are blocking visibility and flood fight capability. Inspector Comments: Elderberries on the landward levee toe.					

Photo 1 of 1 : SP_2015_MA0003_195_19_20150401_00007.jpg



This photo was taken from the levee crown facing south looking down the landward levee slope at a group of Elderberries. Fall 2013.

LM Start	4.15	Rating **	M	Issue No.	10
LM End	4.18	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.937454 °	38.937937 °
				-121.588544 °	-121.588471 °
DWR ID	DWR_MA0003_01_f_2014_10				
Action/Comments					
Inspector Comments: 2013: Minor toe scour causing gradual erosion of bank slope. Site is within ecological reserve. [2013 Site ID: FHR_12-3_R]					

Photo 1 of 2 : SP_2015_MA0003_195_10_20150401_00002.jpg



USACE 2013 Photo #1

LM Start	4.15	Rating **	M	Issue No.	10 (cont)
LM End	4.18	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2015_MA0003_195_10_20150401_00003.jpg



USACE 2013 Photo #2

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Unit No. 01 Feather River	Right	5.11	04/17/2015 04/17/2015	Michael Pitta

LM Start	4.71	Rating **	M	Issue No.	11
LM End	4.76	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	USACE Erosion Survey			38.945190 °	38.945967 °
				-121.586073 °	-121.586328 °
DWR ID	DWR_MA0003_01_f_2014_11				
Action/Comments					
Inspector Comments: 2013: Minor toe scour causing gradual erosion into the bank slope [2013 Site ID: FHR_12-8_R]					

Photo 1 of 2 : SP_2015_MA0003_195_11_20150401_00004.jpg



USACE 2013 Photo #1

LM Start	4.71	Rating **	M	Issue No.	11 (cont)
LM End	4.76	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2015_MA0003_195_11_20150401_00005.jpg



USACE 2013 Photo #2

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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